

Abstract Submitted
for the 4CF13 Meeting of
The American Physical Society

TALE Hybrid Simulation and Analysis DMITRI IVANOV, Univ of Utah, TELESCOPE ARRAY COLLABORATION — The Telescope Array (TA) is the largest cosmic ray detector in the Northern hemisphere that observes cosmic rays of primary energies above 10^{18} eV. The Telescope Array Low-energy Extension (TALE) is built to provide additional observational capability for primary energies between 3×10^{16} eV and 10^{18} eV. TALE is a hybrid detector which consists of ten additional fluorescence telescopes situated at the TA Middle Drum (TAMD) fluorescence detector site with 30 to 57 degree sky coverage in elevation, and an infill surface array of 105 plastic scintillation counters with variable 400 to 600-meter spacing. Together with the original TAMD detector, this yields a combined sky coverage of 112 degrees in azimuth and 3 to 57 degrees in elevation for the Middle Drum site. In this presentation, we describe the simulation and reconstruction techniques used for analyzing the TALE data.

Dmitri Ivanov
Univ of Utah

Date submitted: 27 Sep 2013

Electronic form version 1.4